McCoy, Erin

From:

Jackson, Hylton [DNR] < Hylton.Jackson@dnr.iowa.gov>

Sent:

Monday, April 27, 2015 8:41 AM

To:

McCoy, Erin

Cc:

Dalal, Pradip; Lundberg, Cal [DNR]

Subject:

RE: Vogel Paint

Attachments:

Vogel-8-15-2014Semi.pdf

As per your request, I have attached the 2014 Semi-Annual report (dated August 15, 2014). The boring logs you are looking for (GMW-35, GMW-36, and GMW-37) are in Appendix A. I am assuming you are going to send your comments to Scott Heemstra at Vogel and/or Keith DeLange at Geotek? Please call with any questions or to discuss your comments.

HYLTON JACKSON Environmental Specialist



Iowa Department of Natural Resources 515-725-8338 | Hylton.Jackson@dnr.iowa.gov 502 East 9th Street, Des Moines, IA 50319

WWW.IOWADNR.GOV





Leading Iowans in Caring for Our Natural Resources.

PLEASE NOTE: Effective Monday, November 24, 2014, my phone number will change to 515-725-8338 and FAX number will be 515-752-8202

From: McCoy, Erin [mailto:McCoy.Erin@epa.gov]

Sent: Thursday, April 23, 2015 2:41 PM

To: Jackson, Hylton [DNR]

Cc: Dalal, Pradip

Subject: RE: Vogel Paint

Hylton, I received the 2014 Annual Groundwater Monitoring Report you forwarded to Sandeep on March 23, 2015 that included IDNR's response. Per the e-mail, EPA has reviewed the report and has a number of comments outlined below. Feel free to call me to discuss. It would be much easier to discuss next week as I'll be in the office and available. Do you have any idea when the next sampling event is scheduled? I'd like to visit the site sometime while they are sampling to familiarize myself with the area.

Also, the report references an August 2014 report for boring logs. EPA does not have a copy of this report. Can you please forward preferably an electronic copy to me?

I look forward to talking to you next week. Thanks!

MICO 40486675

Superfund

General Comments

The original work plan should be referenced within the text to outline the scope of work.

- 2) Deviations from the work plan should be outlined within the report.
- 3) A table consisting of top of casing elevations, down the well measurements/elevations, total depth, and well screen elevations would assist in adequate data evaluation.
- 4) The trend of contaminant concentrations at each well should be indicated in the text rather than indicating concentrations are below the MCL, have been elevated, or consistently below limits.

3.0

- 5) EPA concurs with their recommendations to conduct an FS through evaluation of three remedial technologies (P&T as well as two in-situ techniques).
- 6) Groundwater is proposed to occur in March/April and September/October, while geochemical sampling is proposed in July. Geochemical sampling should occur at the same time as chemicals of concern are sampled and all samples should be collected using the same methodology throughout the year. With this, can metals be collected by passive-diffusion? Do the passive-diffusion samplers proposed to be used in 2015 provide adequate sample volume for all of the samples to be collected?
- 7) Table 1 has a lot of blanks cells. If the chemical was not analyzed, please indicated this within the cell instead of leaving the cell empty.

Specific Comments

- 1) Page 1, Section 2, Paragraph 1, Sentence 1 Indicate the matrix/depth to water at each screen interval. Indicate the vertical gradients in site associated wells. Does the glacial till depicted in the 2005 cross-section have sufficient clay to act as an aquitard separating the shallow from the deep aquifer?
- 2) Page 1, Section 2, Paragraph 1, Sentence 2 The text indicates the shallow aquifer flows north from near wells GMW-20 and GMW-21 and northeast from the two private wells west of the site. Figure 2 depicts groundwater flowing south in the area of the indicated wells. No tables are included in the report that indicate the depth to water/groundwater elevations at the two private wells or any screening intervals/elevations of site associated wells to verify reported statements. Review and revise as appropriate.
- 3) Page 1, Section 2, Paragraph 1, Sentences 3 & 4 The indicated depths to water are the same as indicated in the 2005 report. Has the water table consistently been at the indicated depth (e.g. TC-7 at 7 ft) or range of depths (e.g. 16 ft 18 ft at GMW-13/14) for the past 10 years? Please revise the report to include an additional table with the current and historic water levels.
- 4) Page 1, Section 2, Paragraph 1, Last sentence The text indicates the upper alluvial sand containing the shallow aquifer slopes to the north. Is there a cross-section north of well GMW-14 that depicts the indicated conditions?
- 5) Page 1, Section 2, Paragraph 2, Sentence 1 The text indicates the shallow aquifer and deep aquifer commingle near GMW-14. Indicate the geologic feature (lens, layer, etc.)/matrix alteration and/or hydrogeologic change that occurs in this area that explains the apparent comingling of the two aquifers.
- 6) Page 2, Section 2, Paragraph 1, Sentence 1 The text indicates the deep aquifer originates near GMW-14? Please explain. Figure 2 depicts what appears to be several different flow directions on the northern extent of the site with no associated groundwater elevations depicted by the contours. Please review and revise appropriate.
- 7) Page 2, Section 3 Figure 2 depicts groundwater with a 90 degree change in the groundwater flow direction (i.e. from southerly to easterly) in the area of the new wells (GMW-35/36/37). Please explain this phenomenon.
- 8) Page 2, Section 4, Paragraph 3 Review and revise.
 - a. In Figure 3, well GMW-21 should be labeled; the lateral extent to the southern portion of the xylene plume is not adequately delineated; re-evaluate/explain the plume delineation in the area of wells GMW-15, GMW-17, GMW-20, and GMW-21.
 - b. In order to evaluate the impact of natural attenuation, there should be the ability to adequately determine if the plume is stable, shrinking or expanding.
 - c. The ethylbenzene plume on Figure 4 depicts well GMW-22 as the lateral extent; this well has not been sampled since November 2011; re-evaluate/explain the plume delineation in the area of wells GMW-17 and GMW-20.
 - d. The benzene plume (Figure 6) should be depicted as continuous; no data to indicate otherwise.
 - e. Where the new wells screened in the same/similar interval/matrix as well GMW-30?
 - f. Concentrations in Figure 3 through 6 use both μ g/L and ppb; revise to be consistent, preferably with μ g/L to correspond with MDLs.
- 9) Page 3, Section 4 GMW-30 Yearly trends may increase or decrease but since March 2013 the trend in benzene and ethylbenzene concentrations appear to be increasing. Indicate the change and determine the reason, if possible.

McCoy, Erin

From: Jackson, Hylton [DNR] <Hylton.Jackson@dnr.iowa.gov>

Sent: Tuesday, May 19, 2015 7:34 AM

To:Scott.Heemstra@vogelpaint.com; Keith DelangeCc:Dalal, Pradip; Lundberg, Cal [DNR]; McCoy, Erin

Subject: RE: Vogel Paint

Scott and Keith,

As Keith and I discussed yesterday, I am forwarding EPA's comments on the 2014 Annual Groundwater Monitoring Report. If Vogel has any questions or comments to EPA, you may contact Ms. McCoy. I understand that Vogel plans on submitting an evaluation/work plan of remediation methods in the near future (June?). I think that a meeting to review and discuss those methods may be beneficial.

HYLTON JACKSON Environmental Specialist



Iowa Department of Natural Resources 515-725-8338 | <u>Hylton.Jackson@dnr.iowa.gov</u> 502 East 9th Street, Des Moines, IA 50319

WWW.IOWADNR.GOV



Leading Iowans in Caring for Our Natural Resources.

PLEASE NOTE: Effective Monday, November 24, 2014, my phone number will change to 515-725-8338 and FAX number will be 515-752-8202

From: McCoy, Erin [mailto:McCoy.Erin@epa.gov]

Sent: Tuesday, April 28, 2015 11:06 AM

To: Jackson, Hylton [DNR]

Cc: Dalal, Pradip; Lundberg, Cal [DNR]

Subject: RE: Vogel Paint

Hylton, I looked back in the file to the 1990 Memorandum of Understanding between EPA and IDNR and it says:

The EPA RPM shall provide review of and comments to all RD/RA related technical documents submitted as part of this agreement. Review of and comment to the submitted documents shall be provided by EPA to IDNR according to the schedule in Attachment 1 in this MOU. Site work or the next phase of the project my proceed upon IDNR approval; however, IDNR shall address EPA's written comments, if any, made regarding RD/RA activities.

Given this, I don't plan to submit EPA's comments to either Scott or Keith. However, please feel free to include my information on an e-mail or letter so that they can contact me if they have any questions. Or as per the agreement, IDNR can address the comments.

Since we are going to be working together on this, would it be beneficial to discuss how best to handle reports going forward? Or does this system work for you? While we can't change the agreement, we may be able to work together to set up deadlines for EPA comments or something that will make this process easier. Would Wednesday or Thursday afternoon work for a you for a call? I'm available any time before 4 pm.

Erin McCoy, P.G.
Remedial Project Manager
Iowa/Nebraska Remedial Branch
Superfund Division
USEPA Region 7
11201 Renner Boulevard
Lenexa, KS 66219

TEL: 913-551-7977 Email: McCoy.Erin@epa.gov

From: Jackson, Hylton [DNR] [mailto:Hylton.Jackson@dnr.iowa.gov]

Sent: Monday, April 27, 2015 8:41 AM

To: McCoy, Erin

Cc: Dalal, Pradip; Lundberg, Cal [DNR]

Subject: RE: Vogel Paint

As per your request, I have attached the 2014 Semi-Annual report (dated August 15, 2014). The boring logs you are looking for (GMW-35, GMW-36, and GMW-37) are in Appendix A. I am assuming you are going to send your comments to Scott Heemstra at Vogel and/or Keith DeLange at Geotek? Please call with any questions or to discuss your comments.

HYLTON JACKSON Environmental Specialist



Iowa Department of Natural Resources 515-725-8338 | <u>Hylton.Jackson@dnr.iowa.gov</u> 502 East 9th Street, Des Moines, IA 50319

WWW.IOWADNR.GOV



Leading Iowans in Caring for Our Natural Resources.

PLEASE NOTE: Effective Monday, November 24, 2014, my phone number will change to 515-725-8338 and FAX number will be 515-752-8202

From: McCoy, Erin [mailto:McCoy.Erin@epa.gov]

Sent: Thursday, April 23, 2015 2:41 PM

To: Jackson, Hylton [DNR]

Cc: Dalal, Pradip

Subject: RE: Vogel Paint

Hylton, I received the 2014 Annual Groundwater Monitoring Report you forwarded to Sandeep on March 23, 2015 that included IDNR's response. Per the e-mail, EPA has reviewed the report and has a number of comments outlined below. Feel free to call me to discuss. It would be much easier to discuss next week as I'll be in the office and available. Do you have any idea when the next sampling event is scheduled? I'd like to visit the site sometime while they are sampling to familiarize myself with the area.

Also, the report references an August 2014 report for boring logs. EPA does not have a copy of this report. Can you please forward preferably an electronic copy to me?

I look forward to talking to you next week. Thanks!

General Comments

- 1) The original work plan should be referenced within the text to outline the scope of work.
- 2) Deviations from the work plan should be outlined within the report.
- 3) A table consisting of top of casing elevations, down the well measurements/elevations, total depth, and well screen elevations would assist in adequate data evaluation.
- 4) The trend of contaminant concentrations at each well should be indicated in the text rather than indicating concentrations are below the MCL, have been elevated, or consistently below limits.
- 5) EPA concurs with their recommendations to conduct an FS through evaluation of three remedial technologies (P&T as well as two in-situ techniques).
- 6) Groundwater is proposed to occur in March/April and September/October, while geochemical sampling is proposed in July. Geochemical sampling should occur at the same time as chemicals of concern are sampled and all samples should be collected using the same methodology throughout the year. With this, can metals be collected by passive-diffusion? Do the passive-diffusion samplers proposed to be used in 2015 provide adequate sample volume for all of the samples to be collected?
- 7) Table 1 has a lot of blanks cells. If the chemical was not analyzed, please indicated this within the cell instead of leaving the cell empty.

Specific Comments

- 1) Page 1, Section 2, Paragraph 1, Sentence 1 Indicate the matrix/depth to water at each screen interval. Indicate the vertical gradients in site associated wells. Does the glacial till depicted in the 2005 cross-section have sufficient clay to act as an aquitard separating the shallow from the deep aquifer?
- 2) Page 1, Section 2, Paragraph 1, Sentence 2 The text indicates the shallow aquifer flows north from near wells GMW-20 and GMW-21 and northeast from the two private wells west of the site. Figure 2 depicts groundwater flowing south in the area of the indicated wells. No tables are included in the report that indicate the depth to water/groundwater elevations at the two private wells or any screening intervals/elevations of site associated wells to verify reported statements. Review and revise as appropriate.
- 3) Page 1, Section 2, Paragraph 1, Sentences 3 & 4 The indicated depths to water are the same as indicated in the 2005 report. Has the water table consistently been at the indicated depth (e.g. TC-7 at 7 ft) or range of depths (e.g. 16 ft 18 ft at GMW-13/14) for the past 10 years? Please revise the report to include an additional table with the current and historic water levels.
- 4) Page 1, Section 2, Paragraph 1, Last sentence The text indicates the upper alluvial sand containing the shallow aquifer slopes to the north. Is there a cross-section north of well GMW-14 that depicts the indicated conditions?
- 5) Page 1, Section 2, Paragraph 2, Sentence 1 The text indicates the shallow aquifer and deep aquifer commingle near GMW-14. Indicate the geologic feature (lens, layer, etc.)/matrix alteration and/or hydrogeologic change that occurs in this area that explains the apparent comingling of the two aquifers.
- 6) Page 2, Section 2, Paragraph 1, Sentence 1 The text indicates the deep aquifer originates near GMW-14? Please explain. Figure 2 depicts what appears to be several different flow directions on the northern extent of the site with no associated groundwater elevations depicted by the contours. Please review and revise appropriate.
- 7) Page 2, Section 3 Figure 2 depicts groundwater with a 90 degree change in the groundwater flow direction (i.e. from southerly to easterly) in the area of the new wells (GMW-35/36/37). Please explain this phenomenon.
- 8) Page 2, Section 4, Paragraph 3 Review and revise.

- a. In Figure 3, well GMW-21 should be labeled; the lateral extent to the southern portion of the xylene plume is not adequately delineated; re-evaluate/explain the plume delineation in the area of wells GMW-15, GMW-17, GMW-20, and GMW-21.
- b. In order to evaluate the impact of natural attenuation, there should be the ability to adequately determine if the plume is stable, shrinking or expanding.
- c. The ethylbenzene plume on Figure 4 depicts well GMW-22 as the lateral extent; this well has not been sampled since November 2011; re-evaluate/explain the plume delineation in the area of wells GMW-17 and GMW-20.
- d. The benzene plume (Figure 6) should be depicted as continuous; no data to indicate otherwise.
- e. Where the new wells screened in the same/similar interval/matrix as well GMW-30?
- f. Concentrations in Figure 3 through 6 use both μ g/L and ppb; revise to be consistent, preferably with μ g/L to correspond with MDLs.
- 9) Page 3, Section 4 GMW-30 Yearly trends may increase or decrease but since March 2013 the trend in benzene and ethylbenzene concentrations appear to be increasing. Indicate the change and determine the reason, if possible.
- 10) Page 6, Section 4 GMW-20 The text should indicate the contaminate trend for this well. From the graph it appear to be slightly increasing.
- 11) Page 7, Section 4 GMW-7R The text indicates concentrations have been elevated for two years. The text should indicate the contaminate trend (increasing) for this well and the potential cause, if possible.
- 12) Page 15, Section 8, Paragraph 1, Sentence 2 Whereas natural biodegradation may be occurring, the lines of evidence are not conclusive. Natural attenuation is ineffective in reducing the source area and is not inhibiting the migration of contaminants offsite.
- 13) Page 15, Section 8, Paragraph 3 Place ORP comments in context through a brief discussion of historic results. This may provide a sense of how this indicator overtime indicates aerobic biodegradation is occurring at the site. ORP readings are either a possible or likely indicator that anaerobic conditions were present (i.e. readings of less than 50 mV) at the site from 2009 to 2012. Overall, ORP reading have turned increasingly positive in 2013 and 2014 thereby indicating a more aerobic environment.
- 14) Page 15, Section 8, Paragraph 4 Typically anaerobic conditions are indicated by DO readings of less than 0.5 mg/L. DO readings since 2009 have indicated aerobic conditions. Reevaluate the geochemical data collectively and determine if supports biodegradation and revise the discussion, if necessary.
- 15) Page 15, Section 8, Paragraph 6, Sentence 1 Indicate iron (FeII) demonstrated the most consistent evidence that anaerobic biodegradation was occurring rather than only biodegradation.
- 16) Page 16, Section 9, Paragraph 2 Whereas the Vogel site may be considered Low Risk under the IDNR, the NCP states that EPA expects to return usable groundwater to their beneficial uses wherever practicable, within a timeframe that is reasonable given the particular circumstances of the site.
- 17) Page 16, Section 10, Paragraph 3 The use of average concentrations of contaminants is not appropriate and each constituent should be considered on a well by well basis.

Erin McCoy, P.G.
Remedial Project Manager
lowa/Nebraska Remedial Branch
Superfund Division
USEPA Region 7
11201 Renner Boulevard
Lenexa, KS 66219

TEL: 913-551-7977 Email: McCoy.Erin@epa.gov

From: Jackson, Hylton [DNR] [mailto:Hylton.Jackson@dnr.iowa.gov]
Sent: Monday, March 23, 2015 8:02 AM

To: Mehta, Sandeep

4

Cc: Lundberg, Cal [DNR]; Dalal, Pradip

Subject: RE: Vogel Paint

Sandeep

I have received the 2014 Annual report for the Vogel Site (see attached). In the report, Vogel addresses some of the issues raised in the Five-Year Report and I have responded. I am forwarding the 2014 annual report and my response for your review and comment. Can send hard copies if required. If required, please supply a mailing address.

Thanks, Hylton

HYLTON JACKSON Environmental Specialist



lowa Department of Natural Resources

515-725-8338 | <u>Hylton.Jackson@dnr.iowa.gov</u> 502 East 9th Street, Des Moines, IA 50319

WWW.IOWADNR.GOV ☐ ← ☐

Leading Iowans in Caring for Our Natural Resources.

PLEASE NOTE: Effective Monday, November 24, 2014, my phone number will change to 515-725-8338 and FAX number will be 515-752-8202

From: Mehta, Sandeep [mailto:mehta.sandeep@epa.gov]

Sent: Wednesday, February 04, 2015 12:16 PM

To: Jackson, Hylton [DNR]

Cc: Lundberg, Cal [DNR]; Dalal, Pradip

Subject: RE: Vogel Paint

Mr. Hylton:

Hello.

I had the opportunity to review the latest five year report. This document already has a great time line included as part of the report that will provide the information you are trying to put together through the help of your contractor.

I was trying to see if you had any update on the timeline information and such. I have attached your email below for your ready reference.

The sooner we are able to get together on this report implementations, the better it would be for the project. Let us know if we can assist.

Regards, Sandeep Mehta, P.E. mehta.sandeep@epa.gov

Phone: 913-551-7763



From: Jackson, Hylton [DNR] [mailto:Hylton.Jackson@dnr.iowa.gov]

Sent: Thursday, December 11, 2014 3:38 PM

To: Mehta, Sandeep

Cc: Lundberg, Cal [DNR]; Keith Delange

Subject: RE: Vogel Paint

Sandeep,

Sorry about the delay. As I or phone conversation, your main concern is about the first recommendation in the five year review that reads "Restart or reconstruct the existing groundwater treatment plant." Please contact me with the specifics of what you are looking for. I am going to review the file and put together a time line of pertinent information regarding the treatment plant (ROD, date of startup, ESD, date the plant was shut down, etc.) We will review the timeline in house and develop a response to your request for information and state our position on that specific issue and other significant site conditions. I will try to get the file reviewed and get our response to you by the last week of December or the first week of January. Please note that I have contacted Vogel's environmental consultant, GEOTEK, as I see no reason why they should not be part of this dialog. I will be out of the office tomorrow but can be reached at 641 373 2083. I will be in the office Monday morning (12/15/2014) and then in the field for the rest of that week (December 16, 17, and 18). Hylton

HYLTON JACKSON Environmental Specialist



lowa Department of Natural Resources

515 242 5084 | <u>Hylton.Jackson@dnr.iowa.gov</u> 502 East 9th Street, Des Moines, IA 50319

WWW.IOWADNR.GOV

7 t 0

Leading Iowans in Caring for Our Natural Resources.

PLEASE NOTE: Effective Monday, November 24, 2014, my phone number will change to 515-725-8338 and FAX number will be 515-752-8202

From: Mehta, Sandeep [mailto:mehta.sandeep@epa.gov]

Sent: Tuesday, November 25, 2014 6:43 AM

To: Jackson, Hylton [DNR] **Subject:** Vogel Paint

Hylton:

Hi. Good morning.

I wanted to provide my email and phone number, for your convenience. When you are ready to send me the information on Vogel Paint, just email it to me. I will review it and see what EPA needs to figure out.

Any idea on when you may be able to provide IDNR input for the project as we discussed on November 14, 2014?

Regards, Sandeep Mehta, P.E. <u>mehta.sandeep@epa.gov</u> Phone: 913-551-7763

